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09/541,185	04/03/2000	Clive C. Hayball	584-1025	4920
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William M Lee Jr Lee Mann Smith McWilliams Sweeney & Ohlson P O Box 2786 Chicago, IL 60690-2786			EXAMINER	
			LAFORGIA, CHRISTIAN A	
			ART UNIT	PAPER NUMBER
			2155	\bigcirc
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/541,185	HAYBALL ET AL.			
Office Action Summary	Examiner	Art Unit			
	Christian La Forgia	2155			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status	•				
1) Responsive to communication(s) filed on					
,_	s action is non-final.	accoution on to the movite is			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-27</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9)⊠ The specification is objected to by the Examiner					
10)⊠ The drawing(s) filed on <u>03 April 2000</u> is/are: a)[] accepted or b) $igtie{igtie}$ objected to by th	e Examiner.			
Applicant may not request that any objection to the		, ,			
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12)⊠ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☒ None of:	have been accessed				
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) atent Application (PTO-152)			

Art Unit: 2155

DETAILED ACTION

1. Claims 1 through 27 are presented for examination.

Oath/Declaration

- 2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.
- 3. The oath or declaration is defective because:

The full name of each inventor (family name and at least one given name together with any initial) has not been set forth. See MPEP 605.04(a) and 605.04(b).

Drawings

- 4. The drawings are objected to because several of the figures are difficult to read and the lines, numbers and characters are not of uniform size and thickness. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 5. The Patent and Trademark Office no longer makes drawing changes. See 1017 O.G. 4.
 It is applicant's responsibility to ensure that the drawings are corrected. Corrections must be made in accordance with the instructions below.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability."

Application/Control Number: 09/541,185

Art Unit: 2155

Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, MUST be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings MUST be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Specification

- 6. Applicant is reminded of the proper content of an abstract of the disclosure.
- A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

Page 3

Art Unit: 2155

8. The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

- 9. Where applicable, the abstract should include the following:
- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.
- 10. Extensive mechanical and design details of apparatus should not be given.
- 11. The use of the trademark Crosskeys Resolve Si, Hewlett Packard Firehunter, "resolve reporter," "resolve configuration," and Nortel Networks Corporation has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.
- 12. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.
- 13. The attempt to incorporate subject matter into this application by reference to United States Patent Application 08/918,895 is improper because the case was expressly abandoned on 26 October 2000. See MPEP 608.01(p).
- 14. The attempt to incorporate subject matter into this application by reference to United States Patent Application 08/921,649 is improper because the case was expressly abandoned on 31 October 2000. See MPEP 608.01(p).

Art Unit: 2155

15. References to United States Patent Application 08/921,208 should be changed to United States Patent Number 6,233,610.

- 16. References to United States Patent Application 08/921,225 should be changed to United States Patent Number 6,018,625.
- 17. References to United States Patent Application 09/124,479,208 should be changed to United States Patent Number 6,349,332.

Claim Rejections - 35 USC § 112

- 18. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claim?
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 19. Regarding claim 6, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
- 20. Claim 12 recites the limitation "specified bandwidth" in the claim limitation, there is no mention before this of specifying an amount of bandwidth. There is insufficient antecedent basis for this limitation in the claim.
- 21. Claim 24 recites the limitation "specified bandwidth" in the claim limitation, there is no mention of this in any of the preceding claims. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 2155

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 23. Claims 1 through 10, 13 through 17, 20 through 22, and 25 through 27 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,253,248 to Dravida et al., (hereinafter Dravida).
- 24. As per claim 1, Dravida teaches a method of provisioning a path between two specified nodes in a connectionless communications network such that the path has a specified bandwidth and a guaranteed quality of service is provided over that path, wherein the communications network supports a differentiated service mechanism, solid method comprising the steps of:
- (i) accessing a model of the connectionless communications network (Figures 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 [block 2101, 2103, 2104], 28 [block 2801], 29, & 30; column 8, lines 27-60; column 11, line 53 to column 12, line 44);
- (ii) determining a path between the two specified nodes using the model (Figures 21 [blocks 2102, 2104, 2105], 22 [blocks 2201, 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402, 2403, 2404, 2405, 2406], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 9, line 58 to column 10, line 29);
- (iii) assessing the amount of available bandwidth over the path using the model (Figures 24 [blocks 2403, 2404, 2405], 25 [block 2408], 26 [block 2601], 27 [block 2740], 28 [block 2802], & 30; column 10, lines 41-53; column 12, lines 13-44); and
- (iv) producing provisioning information to provision the path using the model (Figures 21 [blocks 2103, 2104], 22 [blocks 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402], 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 11, lines 23-53).

25. Regarding claim 2, Dravida teaches wherein the step (iii) of assessing the amount of available bandwidth comprises accessing a bandwidth tally for each node in the path (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802],

& 30; column 9, lines 44-58; column 10, lines 1-22; column 12, lines 12-55)

- With regards to claim 3, Dravida teaches which further comprises accessing a bandwidth tally for each link in the path (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 9, lines 44-58; column 10, lines 1-22; column 12, lines 12-55).
- 27. Regarding claim 4, Dravida teaches which further comprises inputting the provisioning information to the communications network in order to provision the communications network (Figures 21 [block 2101], 22 [block 2201], 24 [blocks 2401, 2402, 2406], 25 [blocks 2407, 2409], & 28 [blocks 2801, 2802, 2820, 2830]; column 9, lines 16-44; column 11, line 53 to column 12, line 13).
- 28. Regarding claim 5, Dravida teaches wherein the path is auto generated (Figure 24, 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 12, lines 6-13).
- 29. Concerning claim 6, Dravida teaches wherein the path is determined using an algorithm (column 9, lines 16-44).

- 30. Regarding claim 7, Dravida teaches wherein the path is determined using a discovery method (Figures 21, 22 [blocks 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402, 2403, 2406]; column 9, lines 7-44).
- With regards to claim 8, Dravida teaches wherein the path is pre-specified by a network operator (Figures 26 [blocks 2603, 2604], 27 [blocks 2760, 2750, 2740], & 28 [blocks 2820, 2830]; column 11, lines 22-53).
- 32. Regarding claim 9, Dravida teaches which further comprises the step of adding service type labels to traffic (Figures 26 [blocks 2603, 2604], 27 [blocks 2760, 2750, 2740], & 28 [blocks 2820, 2830]; column 11, lines 22-53; column 11, line 53 to column 12, line 13).
- 33. Regarding claim 10, Dravida teaches wherein the connectionless communications network is an Internet protocol communications network (column 1, lines 12-24; column 4, lines 43-66).
- 34. Regarding claim 13, Dravida teaches wherein the differentiated service mechanism comprises priority queuing (Figure 26; column 4, lines 22-28).
- 35. Regarding claim 14, Dravida teaches wherein the differentiated service mechanism comprises allocating traffic to one of two or more service types and one of the two specified

nodes is arranged to label traffic according to its allocated service type (Figures 26 [blocks 2603, 2604], 27 [blocks 2760, 2750, 2740], & 28 [blocks 2820, 2830]; column 11, lines 22-53; column 11, line 53 to column 12, line 13).

- Regarding claim 15, Dravida teaches wherein the differentiated service mechanism comprises allocating traffic to one of two or more service types and wherein the method further comprises determining the proportion of the bandwidth at a given node or link that is reserved for use by traffic of a given service type (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 9, lines 44-58; column 10, lines 1-22; column 10, line 41 to column 11, line 5; column 12, lines 12-55).
- 37. Regarding claim 16, Dravida teaches wherein the provisioning information is determined such that the proportion is less than a specified threshold level (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 10, line 41 to column 11, line 5).
- 38. As per claim 17, Dravida teaches a computer system for provisioning a path between two specified nodes in a connectionless communications network such that the path has a specified bandwidth and a guaranteed quality of service, wherein the communications network supports a differentiated service mechanism, the computer system comprising:

Art Unit: 2155

(i) a processor arranged to access a model of the connectionless communications network (Figures 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 [block 2101, 2103, 2104], 28 [block 2801], 29, & 30; column 8, lines 27-60; column 11, line 53 to column 12, line 44);

- (ii) the processor being arranged to determine a path between the two specified nodes using the model (Figures 21 [blocks 2102, 2104, 2105], 22 [blocks 2201, 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402, 2403, 2404, 2405, 2406], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 9, line 58 to column 10, line 29); and wherein the processor is further arranged to assess the amount of available bandwidth over the path using the model (Figures 24 [blocks 2403, 2404, 2405], 25 [block 2408], 26 [block 2601], 27 [block 2740], 28 [block 2802], & 30; column 10, lines 41-53; column 12, lines 13-44); and
- (iii) wherein the processor is further arranged to use the model to produce provisioning information to provision the path (Figures 21 [blocks 2103, 2104], 22 [blocks 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402], 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 11, lines 23-53).
- 39. Regarding claim 20, Dravida teaches wherein the processor is further arranged to access a bandwidth tally for each node in the path (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 9, lines 44-58; column 10, lines 1-22; column 12, lines 12-55).

- 40. Regarding claim 21, Dravida teaches wherein the processor is arranged to determine the path using auto generation (Figure 24, 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 12, lines 6-13).
- 41. Regarding claim 22, Dravida teaches wherein the connectionless communications network is an Internet protocol communications network (column 1, lines 12-24; column 4, lines 43-66).
- 42. Regarding claim 25, Dravida teaches wherein the differentiated service mechanism comprises priority queuing (Figure 26; column 4, lines 22-28).
- 43. As per claim 26, Dravida teaches computer program stored on a computer readable medium, the computer program being arranged to control a computer system for provisioning a path between two specified nodes in a connectionless communications network such that the path has a specified bandwidth and a guaranteed quality of service is provided over that path, wherein the communications network supports a differentiated service mechanism; the computer program being arranged to control the computer system such that:
- (i) a model of the connectionless communications network is accessed (Figures 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 [block 2101, 2103, 2104], 28 [block 2801], 29, & 30; column 8, lines 27-60; column 11, line 53 to column 12, line 44);

Page 12

Application/Control Number: 09/541,185

Art Unit: 2155

- (ii) a path between the two specified nodes is determined using the model (Figures 21 [blocks 2102, 2104, 2105], 22 [blocks 2201, 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402, 2403, 2404, 2405, 2406], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 9, line 58 to column 10, line 29);
- (iii) the amount of available bandwidth over the path is assessed using the model (Figures 24 [blocks 2403, 2404, 2405], 25 [block 2408], 26 [block 2601], 27 [block 2740], 28 [block 2802], & 30; column 10, lines 41-53; column 12, lines 13-44); and
- (iv) provisioning information to provision the path is produced using the model (Figures 21 [blocks 2103, 2104], 22 [blocks 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402], 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 11, lines 23-53).
- 44. Regarding claim 27, Dravida teaches a connectionless communications network (Abstract).

Claim Rejections - 35 USC § 103

- 45. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 46. Claims 11, 18, and 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida in view of United States Patent No. 6,430,154 to Hunt et al., (hereinafter Hunt).

Application/Control Number: 09/541,185

Art Unit: 2155

47. Regarding claim 11, Dravida does not teach wherein the path is a virtual leased line.

Page 13

48. Hunt teaches wherein the path is a virtual leased line (column 2, lines 23-46). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the leased lines of Hunt with the system of Dravida because it would ensure a low loss and low delay service to subscribers. It would enable this low loss and low delay by taking into account the random breaks in communication lines by other objects that take precedence.

- 49. Regarding claim 18, Dravida does not teach which further comprises a graphical user interface provided on a client computer connected to the computer system.
- Hunt teaches which further comprises a graphical user interface provided on a client computer connected to the computer system (Figure 2 [block 22]; column 8, lines 32-48).

 Therefore it would have been obvious to one with ordinary skill in the art to combine the GUI of Hunt with the system of Dravida because it would enable a better way to manage network traffic. By giving the ability to see where congestions lie in a graphical setting, it would allow a user to be able to reroute information accordingly.
- 51. With regards to claim 19, Dravida does not teach wherein the graphical user interface is web-based.
- 52. Hunt teaches wherein the graphical user interface is web-based (Figure 2 [block 22]; column 8, lines 32-48). It would have been obvious to one with ordinary skill in the art to combine the web based interface of Hunt with the system of Dravida because it would enable a

better way to manage Internet traffic. By giving the ability to see where congestions lie in a

graphical setting, it would allow a user to be able to reroute information accordingly.

53. Regarding claim 23, Dravida does not teach wherein the path is a virtual leased line.

54. Hunt teaches wherein the path is a virtual leased line (column 2, lines 23-46). Therefore

it would have been obvious to one with ordinary skill in the art at the time the invention was

made to combine the leased lines of Hunt with the system of Dravida because it would ensure a

low loss and low delay service to subscribers. It would enable this low loss and low delay by

taking into account the random breaks in communication lines by other objects that take

precedence.

55. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida

in view of United States Patent No. 5,7510,969 to Kapoor, (hereinafter Kapoor).

56. Regarding claim 12, Dravida does not teach which further comprises the step of inputting

information about the path, the specified bandwidth and quality of service, the differentiated

service mechanism and the provisioning information to a simulator which is arranged to forecast

traffic congestion points in the connectionless communications network.

57. Kapoor teaches which further comprises the step of inputting information about the path,

the specified bandwidth and quality of service, the differentiated service mechanism and the

provisioning information to a simulator which is arranged to forecast traffic congestion points in

the connectionless communications network (Figures 3, 4, & 5; column 4, lines 12-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention

Art Unit: 2155

was made to combine the forecast traffic congestion points of Kapoor with the system of Dravida, because it would enable a quicker and more efficient manner to transfer packets over a connectionless network. It would ensure this quicker and more efficient manner, by predicting bottlenecks and routing information around them, thus allowing the use of the alternative routing paths.

- 58. Regarding claim 24, Dravida does not teach which further comprises a simulator arranged to accept information about the path, the specified bandwidth and quality of service, the differentiated service mechanism and the provisioning information and wherein the simulator is arranged to forecast traffic congestion points in the connectionless communications network.
- 59. Kapoor teaches which further comprises a simulator arranged to accept information about the path, the specified bandwidth and quality of service, the differentiated service mechanism and the provisioning information and wherein the simulator is arranged to forecast traffic congestion points in the connectionless communications network (Figures 3, 4, & 5; column 4, lines 12-67). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the forecast traffic congestion points of Kapoor with the system of Dravida, because it would enable a quicker and more efficient manner to transfer packets over a connectionless network. It would ensure this quicker and more efficient manner, by predicting bottlenecks and routing information around them, thus allowing the use of the alternative routing paths.

Conclusion

60. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

61. The following patents are cited to further show the state of the art with respect to calculating the shortest path through a connectionless oriented network, such as:

United States Patent No. 6,480,495 to Mauger et al., which is cited to show a method to model a connectionless communications network.

United States Patent No. 6,256,295 to Callon, which is cited to show a method for how to determine multiple paths between network nodes.

United States Patent No. 5,995,503 to Crowley et al., which is cited to show a method for providing quality of service in a network.

United States Patent No. 4,736,363 to Aubin et al., which is cited to show a path oriented routing system.

United States Patent No. 5,754,543 to Seid, which is cited to show a multi cost routing system.

United States Patent No. 6,178,169 to Hodgkinson et al., which is cited to show a method for transmitting an ATM cell via an ATM network.

United States Patent No. 6,016,306 to LeBoudec et al., which is cited to show a system for reserving bandwidth.

62. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (703) 305-7704. The examiner can normally be reached on Monday thru Thursday 7-5.

Application/Control Number: 09/541,185

Art Unit: 2155

Page 17

63. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7240 for regular communications and (703) 746-7239 for After Final communications.

64. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Christian La Forgia Patent Examiner Art Unit 2155

clf March 27, 2003

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100